



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 10**

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OFFICE OF  
WATER AND WATERSHEDS

November 7, 2013

Kevin Freeman  
Project Coordinator  
ARCADIS  
695 N. Legacy Ridge Drive, Suite 200  
Liberty Lake, WA 99019

Re: Notification of Discrepancies Observed during Groundwater Monitoring Well Sampling,  
Administrative Order on Consent ("Consent Order")  
Docket No. SDWA-10-2013-0080  
Yakima Valley Dairies, Washington

Dear Mr. Freeman:

As you are aware, on September 17 and 18, 2013, quality assurance staff from the U.S. Environmental Protection Agency, Region 10 ("EPA") conducted oversight of the first quarterly groundwater monitoring well sampling event conducted under the Consent Order at the Yakima Valley Dairies. EPA staff conducted oversight of the ARCADIS team that was collecting samples under the Yakima Valley Dairies Groundwater Monitoring Quality Assurance Project Plan, dated June 21, 2013.

The purpose of the EPA field oversight was to ensure that the QAPP and its associated Standard Operating Procedures (SOPs) were being followed. Sampling oversight was conducted at the following well locations and dates: YVD-10 and YVD-15 on September 17, 2013; and DC-07 and YVD-14 on September 18, 2013. The approximate elapsed duration of purging, stabilization, and sampling at each location was two hours. In general, EPA observed that the ARCADIS groundwater sampling team performed the sampling in accordance with the approved QAPP and SOPs. Although EPA observed no deficiencies that would compromise the integrity of the samples that were collected, the following discrepancies must be corrected for future sampling events:

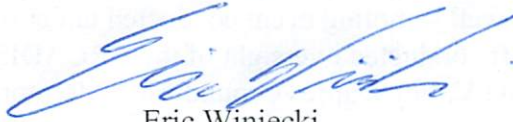
1. Well casings must be notched or marked to indicate the reference point for water level measurements. While water levels were measured from the north side of the well casing, the point must be permanently marked on the well casings to facilitate the consistency of future readings. (Monitoring Well Installation SOP page 11).
2. Chain of Custody forms sent to the lab with the field samples did not identify which field sample(s) the laboratory should utilize for laboratory QC analyses (e.g., matrix spikes/matrix spike duplicates). Field staff must identify groundwater samples for laboratory QC analysis to ensure representativeness of the matrix.
3. The field team indicated that worksheets are often rewritten when there are corrections and/or edits in order to avoid having records which are difficult to read.

EPA standard practice is to retain the original document, with any required corrections single-lined crossed out and dated by the author. EPA prefers that our standard practice be followed. If the field staff elects to rewrite any sampling worksheets to ensure they are legible and correct, the original must also be retained with the revision for complete and transparent documentation.

4. The groundwater sampling worksheet included in the final QAPP referenced above was missing several parameters (i.e., DO, depth to water) that must be measured prior to and during purging to document water level elevation and well stabilization. ARCADIS realized this deficiency in the field and requested that the correct form be brought to the field on Wednesday 9/18/2013. As an interim measure, the sampling team revised (by hand) the form from the QAPP as needed to collect this information. The correct groundwater sampling worksheet template must be provided to EPA and incorporated into the final QAPP as an addendum/correction.

You may contact me at (206) 553-6904, or your legal counsel may contact Jennifer MacDonald at (206) 553-8311, if you have any questions regarding this letter.

Sincerely,



Eric Winiecki  
EPA Project Coordinator  
Office of Water and Watersheds

cc: Jennifer MacDonald  
Rene Fuentes